#### Fiscal Year 2017-1 Pasture

#### Soil Erosion

#### Sheet and Rill Erosion

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. The current erosion prediction technology will be used to calculate sheet and rill erosion. Use the dominant critical soil to calculate this. The soil component for water erosion is the one greater than 10% of the area of interest (AOI) with the highest K (erodibility) factor. Erosion prediction models will be ran on the dominant critical soil of the worst field.

#### Wind Erosion

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. The current erosion prediction technology will be used to calculate wind erosion. Use the dominant critical soil to calculate this. The soil component for wind erosion is the one greater than 10% of the AOI with the greatest sand percentage. Erosion prediction models will be ran on the dominant critical soil of the worst field.

### **Classic Gully Erosion**

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. Classic gully erosion generally occurs in well-defined drainage ways and generally is not obliterated by tillage. In some situations, headcuts are present and aid in advancing the gully upstream. Field observation will be used to determine if classic gullies are present or not.

## Streambank, Shoreline, and Water Conveyance Channels

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. Adjacent is anything less than 100 feet.

https://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs144p2\_042678.pdf

# Soil Quality Degradation

## Organic Matter Depletion

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

#### Compaction

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

#### Concentration of Salts and other Chemicals

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

# Insufficient Water

### Inefficient Use of Irrigation Water

Use Evaluation Test question: An irrigation water management plan is followed that: meets the forage's needs, while maximizing irrigation water efficiency, schedules water application based on soil moisture monitoring and/or evapotranspiration monitoring, measures and records the amount of water you use to irrigate as it comes onto the farm and goes to each field, AND the system's distribution uniformity has been evaluated and necessary changes were made. If pasture is NOT irrigated, mark "N/A" to the Evaluation Test Met. The producer must have the following to meet this micro-resource concern if the ground is irrigated: 1.) An irrigation water management plan, 2.) Soil moisture probes or evapotranspiration (ET) based scheduling program, 3.) Water meter on the water source, and 4.) System uniformity would have to be documented by the center pivot sprinkler nozzle design package or subsurface drip irrigation engineering design. Flood irrigation, volume gun sprinkler, and/or solid set sprinkler irrigation uniformity would need to be analyzed by NRCS on a case by case basis.

#### Inefficient Moisture Management

Use Evaluation Test question: Predominate plants are adapted to the site, usual rain fall, and are useful as intended.

# Water Quality Degradation

#### Pesticides in Surface Water

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. WinPST will not need to be ran if the producer is spot spraying and following label directions.

## Pesticides in Ground Water

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. WinPST will not need to be ran if the producer is spot spraying and following label directions.

#### Nutrients in Surface Water

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

## Nutrients in Ground Water

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

# Petroleum, Heavy Metal, and Other Pollutants Transported to Surface Water

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. The fuel storage area and tank must be located a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well. Any tank over 660 gallons must be doublewalled or have a secondary containment system.

# Petroleum, Heavy Metal, and Other Pollutants Transported to Ground Water

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. The fuel storage area and tank must be located a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well. Any tank over 660 gallons must be doublewalled or have a secondary containment system.

#### **Excessive Sediment in Ground Water**

Use Evaluation Test question: Plant cover controls active erosion (shallow <1 foot deep rills/gullies) and runoff from normal rain events. No litter dams are present.

# **Air Quality Impacts**

#### Emission of Greenhouse Gases (GHGs)

Use Evaluation Test question: Forage supply and demand balance is achieved. The forage supply and demand balance must be achieved on site.

# **Degraded Plant Condition**

## Undesirable Plant Productivity and Health

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

# Inadequate Structure and Composition

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

#### **Excessive Plant Pest Pressure**

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

#### Wildfire Hazard and Excessive Biomass Accumulation

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern.

# Fish and Wildlife – Inadequate Habitat

# Inadequate Habitat - Food

Use Evaluation Test question: The plant cover provides food for the chosen wildlife species. The Kansas State Wildlife Action Plan lists the species of greatest conservation need by ecoregion. The chosen declining species in Kansas for CStP are the Greater Prairie-Chicken, Lesser Prairie-Chicken, and Northern Bobwhite. Review Kansas Biology Technical Note KS-33 [Field Office Technical Guide (FOTG), Section IV, Conservation Practices, Upland Wildlife Habitat Management (645), Fact Sheet] for habitat requirements.

# Inadequate Habitat – Cover/Shelter

Use Evaluation Test question: The plant cover provides cover and shelter for the chosen wildlife species. The Kansas State Wildlife Action Plan lists the species of greatest conservation need by ecoregion. The chosen declining species in Kansas for CStP are the Greater Prairie-Chicken, Lesser Prairie-Chicken, and Northern Bobwhite. Review Kansas Biology Technical Note KS-33 [FOTG, Section IV, Conservation Practices, Upland Wildlife Habitat Management (645), Fact Sheet] for habitat requirements.

### Inadequate Habitat – Habitat Continuity (Space)

Use Evaluation Test questions: 1.) Connectivity between food resources, cover and shelter is provided for the chosen wildlife species. 2.) Plant cover provides space for wildlife species. The Kansas State Wildlife Action Plan lists the species of greatest conservation need by ecoregion. The chosen declining species in Kansas for CStP are the Greater Prairie-Chicken, Lesser Prairie-Chicken, and Northern Bobwhite. Review Kansas Biology Technical Note KS-33 [FOTG, Section IV, Conservation Practices, Upland Wildlife Habitat Management (645), Fact Sheet] for habitat requirements.

#### **Livestock Production Limitation**

## Inadequate Feed and Forage

Use Evaluation Test question: The existing feed/forage quantity/quality meet the livestock needs and goals.

## Inadequate Water

Use Planning Criteria. An evaluation test question will be listed, but DO NOT answer it for this microresource concern. Refer to Kansas Range Technical Note KS-10 for further guidance.

# **Inefficient Energy Use**

# **Equipment and Facilities**

Use Evaluation Test question: Recommendations/components of an energy audit have been applied. The audit addressed equipment and facilities on the farm. For example, energy loss from lighting, drying, refrigeration, heating, or building insulation have been improved. All recommendations/components will need to be applied. If an audit has not been completed, answer this question "NO".

#### Farming/Ranching Practices and Field Operations

Use Evaluation Test question: Recommendations/components of an energy audit have been applied. The audit addressed equipment and facilities on the farm. For example, energy loss from lighting, drying, refrigeration, heating, or building insulation have been improved. All recommendations/components will need to be applied. If an audit has not been completed, answer this question "NO".